Oral cancer treatments and compliance : MEMS® assessment for capecitabine, letrozole and exemestane

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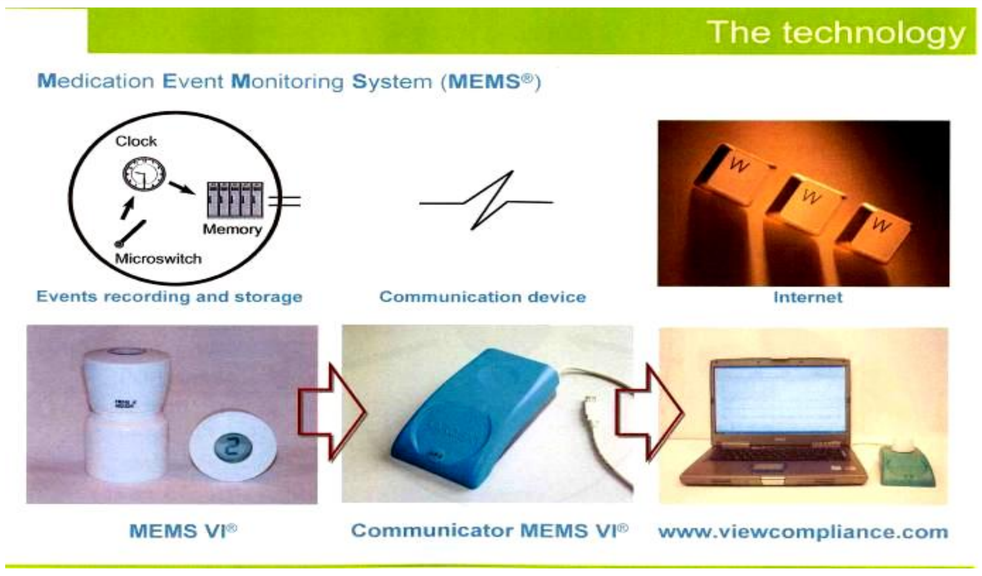
BACKGROUND
Oncological treatments are traditionally administered via intravenous injection by qualified personnel. Oral formulas, which are developing rapidly, are much preferred by patients and facilitate administration, however they may increase non-adherence. In this prospective monocenter non randomized study four common oral chemotherapeutics were given to 40 patients divided into 4 groups according to oral treatments (letrozole/exemestane, imatinib, sunitinib, capecitabine). The aim of this study was to evaluate adherence and to offer these patients interdisciplinary support with the joint help of doctors and pharmacists.

MATERIALS AND METHODS
We present here results for capecitabine and aromatase inhibitors. Adherence was evaluated in 19 patients split into 2 groups using **persistence** (defined as time (days) spent between inclusion and discontinuation of treatment) and **quality of execution** (defined as correspondence between medication take and prescribed regimen) as measurements. Evaluation included measurement of these parameters using **MEMS® (medication event monitoring system)** as well as classical oncological follow-ups and semi-structured interviews. The patients were monitored for the entire duration of treatment up to a maximum of 1 year. Patient satisfaction was estimated at the end of the monitoring period using a standardized questionnaire.

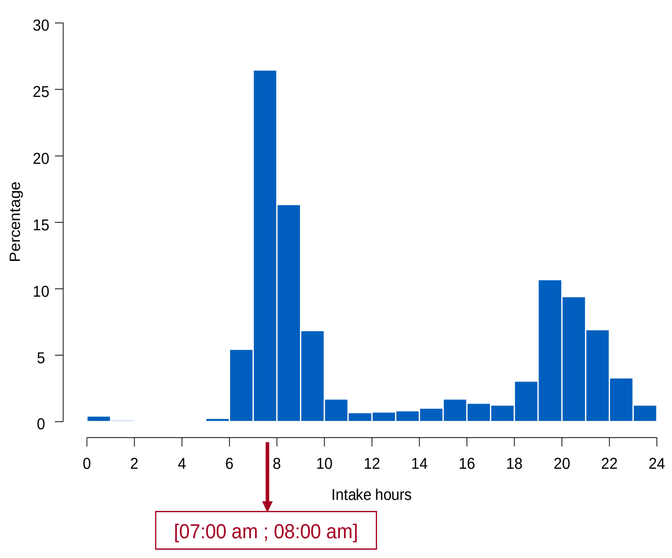


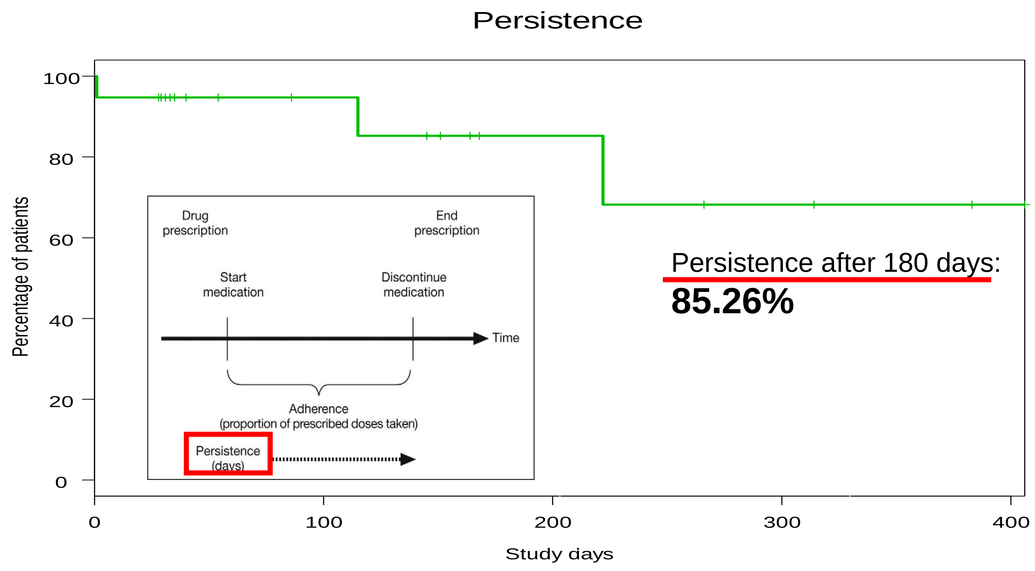
Naoux, Aardex group

RESULTS

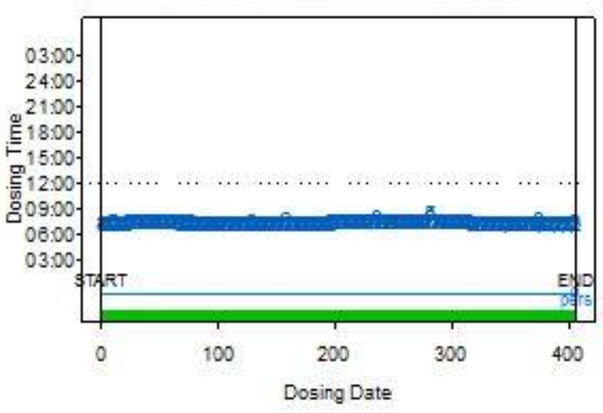
Patients characteristics (n=19)	
Median age	**55** (range 38-77)
Sex	11 women : 8 men
Treatment regimen	AI (9pts) EOX (4pts) Capecitabine mono (3pts) Capecitabine-lapatinib (1pt) Xelox (2 pts)
Toxicities > grade 3	Hand-foot syndrom (1pt) Acute coronary syndrom (1pt)
Median FU duration	**141** (range 3-406)

AI: aromatase inhibitor, EOX: epirubicine-oxaliplatine-xeloda, Xelox: xeloda-oxaliplatine, FU: follow up

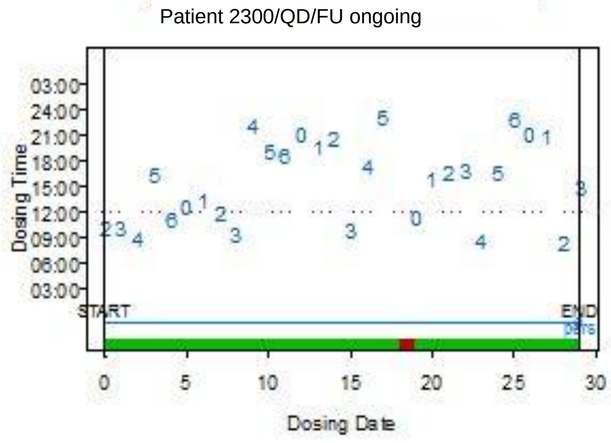




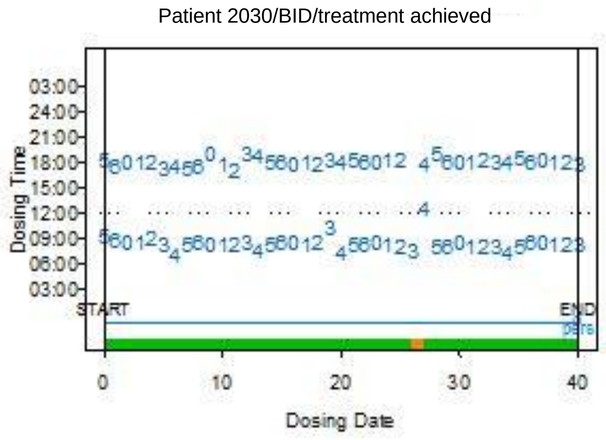
Aromatase inhibitor
Patient 2010/QD/FU achieved



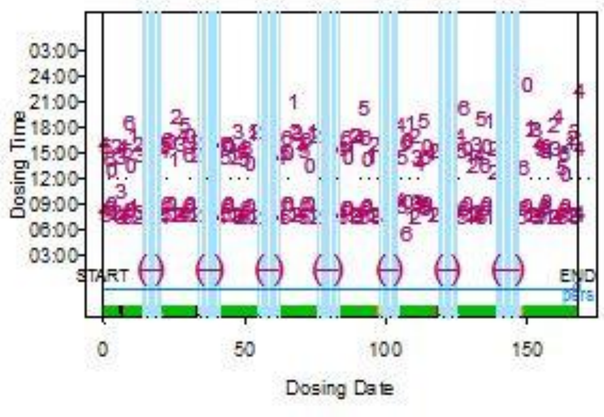
Aromatase inhibitor
Patient 2300/QD/FU ongoing



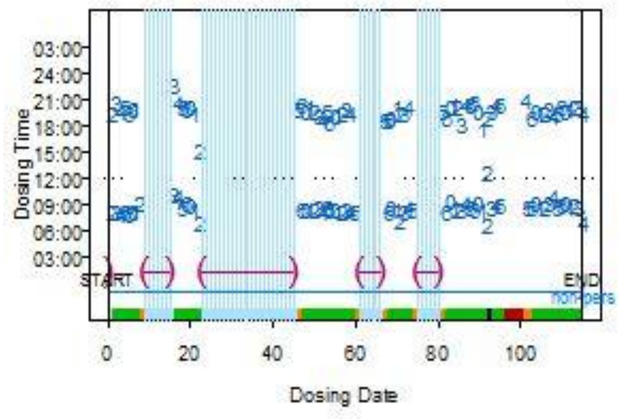
Capecitabine in EOX
Patient 2030/BID/treatment achieved



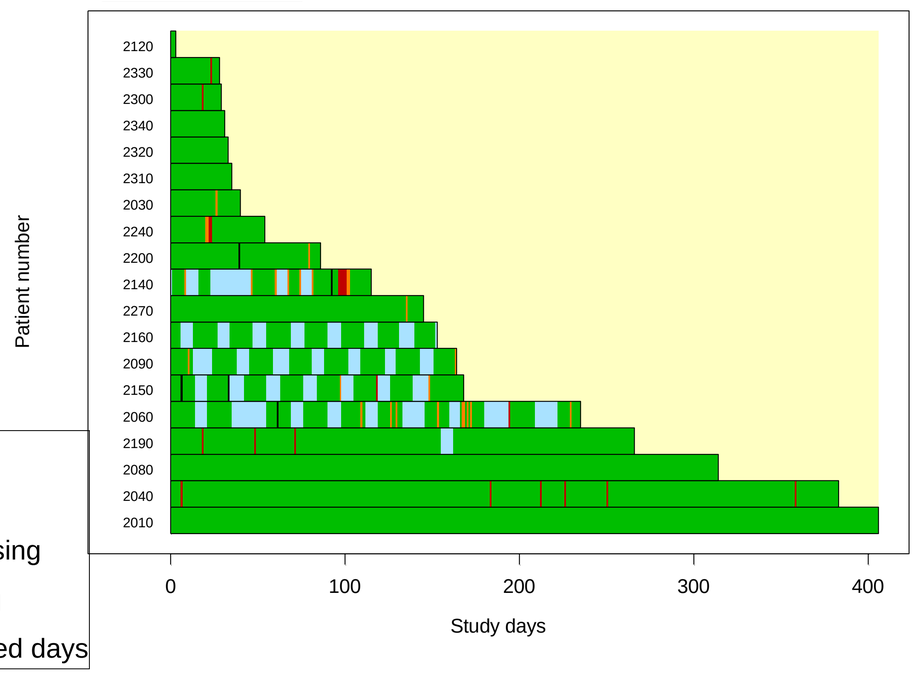
Capecitabine in XELOX
Patient 2150/BID/treatment achieved



Capecitabine in XELOX
Patient 2140/BID/premature stop



Summary



Green: correct number of doses
Red (on green line): no dose
Orange (on green line): underdosing
Black (on green line): overdosing
Blue (vertical lines): non-monitored days

The questionnaire at the end of monitoring allowed us to document patient satisfaction for the interviews offered (57% useful, 28% very useful, 15% useless) and the success in integrating MEMS® into their daily lives (57% very easily, 43% easily).

CONCLUSION
The persistence and quality of execution observed in our capecitabine, letrozole and exemestane patients were excellent as expected compared to previously published studies. The interdisciplinary approach allowed us to better identify and help patients with toxicities to maintain adherence. Overall patients were content with the interdisciplinary follow-up. A longer follow up would allow better evaluation of the full impact of our method. The interpretation of the results of the ongoing inclusions in the other groups will provide us necessary informations for an update analysis.